NOTES ON DIURNAL LEPIDOPTERA, WITH ADDITIONS AND CORRECTIONS TO THE RECENT "LIST OF DIURNAL LEPIDOPTERA"

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As the changes herein made are mostly unexplained in prior literature, the authors add bibliographical references or short notes. One change has been suggested by Dr. J. McDunnough, one by Mr. H. T. G. Watkins, and two by Mr. E. H. Blackmore. Otherwise the authors are responsible. Unless preceded by the letter "p," indicative of page number, all numbers in the left hand column refer to species numbers on the recent list.

26 form alt, hermodur Hy, Edw., change pholus Ehr., err, typ., to polus Ehr.

33 add form transversa B. & Benj.

Ascia sisumbrii gen, vern, transversa nov.

California specimens, including the type of sisymbrii, show very similar forms to those produced in Arizona. Early spring specimens from the latter state, however, show a decided tendency to lose at least part of the fuscous margining the distal portions of the veins on the under side of the hindwing, the mesial portions of the veins not as intensely black—marked as normal, the medial transverse line normal and thus appearing as the heaviest marking. Only about fifty percent of the spring specimens are typical of transversa, the remainder intergrading into the type form.

Type localities: Paradise, Cochise Co., Ariz.; Redington, Ariz. Number and sexes of types: Holotype &, Allotype Q, 1 Q Paratype, all March; 1 & Paratype, no date.

33 add a elivata B. & Benj.

Ascia sisymbrii race elivata nov.

Differing from the type form by the heavier black powdering striating the veins on the underside of the secondaries. Also tending to be somewhat smaller in size.

Type locality: Glenwood Springs, Colo.

Number and sexes of types: Holotype & May 1895, Allotype Q

May 1895, 7 ♂ 14 ♀ Paratypes, various dates April to June.

Notes: Specimens before us indicate a distribution for elivata of Wyoming to Colorado, and probably high altitudes of Eastern California.

49 add corday (Hbn.)

1820, Huebner, Verz. bek. Schmett., p. 99, Colias.

63a add form ♀ shastæ B. & Benj.

Eurymus occidentalis chrysomelas form shasta nov. Albinic Q of chrysomelas, the normal bright yellow replaced by yellowish-white, orange of discal spot on hind wing replaced by whitish.

Type locality: Shasta Retreat, Siskiyou Co., Calif. Number and sexes of types: Holotype & 1.7 July.

65 add form ♀ nepi B. & Benj.

Eurymus interior form nepi nov.

Albinic Q of interior, with a slight tinge of yellowish on the wings.

Type locality: Nepigon, Ontario.

Number and sexes of types: Holotype Q, and 1 Q Paratype both 8-15 July.

67a add form Q hatui B. & Benj.

Eurymus alexandra edwardsi form Q hatui nov.

Albinic 9 of Utah edwardsi, the white slightly creamed by yellow. Type locality: Stockton, Utah.

Number and sexes of types: Holotype Q, VII-30-16; 1 Q Paratype. VIII-5-3.

Notes: Name an anogram.

69b change to b skinneri (Barnes) (partim.)

Eurymus pelidne skinneri Barnes

We hereby restrict the name to a lectotype, the white Q type specimen. Yellowstone Park, Wyo., 8-15 July, in Coll. Barnes.

The reason for doing this is that albinic females appear to

be the normal females of pelidne and palæno.

69b add form ♀ neri B. & Benj.

iskinneri. (Barnes) (partim.)

Eurymus pelidne skinneri form Q neri nov.

Yellow Q of skinneri as described in the original description of that subspecies.

Type locality: Yellowstone Park, Wyo.

Number and sexes of types: Holotype ♀ 8-15 July; 2 ♀ Paratypes, 8-15 July and no date; all being original type females of skinneri Barnes.

69c change c minisni (Bean) to (c) minisni (Bean).

69c add form ♀ isni B. & Benj.

Eurymus pelidne minisni form Q isni nov.

Yellow Q of minisni. The normal Q, and the form discussed by Bean in the original description of minisni is the white female.

Type locality: Laggan, Alta.

Number and sexes of types: Holotype Q, 16-23 Aug.

91a add androcardia Hbn.

1821, Huebner, Ind. exot. Lep., 1, Enodia.

104 add a quebecensis B. & Beni.

Coenonympha inornata race quebecensis nov.

Upper side similar to inornata, the hind wing with a pale gray outer margin interrupted and partly bordered by a dark, disconcolorous, band. Underside similar to ampelos, paler and brighter than in typical inornata, ocellus of fore wing present or absent, when present reduced in size.

Type locality: Chelsea, Ottawa Co., Que.

Number and sexes of types: Holotype Q, 1-7 June; 8 & Paratypes 1-7 and 7-15 June.

106 add a subfusca B. & Benj.

Coenonympha ochracca race subfusca nov.

Much like ochracca on upper side. Underside of secondaries and apex of primaries heavily powdered with black, hind wing with ocelli as in ochracea, median band somewhat reduced, basal pale spots absent.

Type locality: White Mts., Ariz.

Number and sexes of types: Holotype & , 1-7 July, Allotype Q , no date; 4 & 1 Q Paratypes, 1-7 July and no date.

106,1 add No. 106,1 fureæ B. & Benj.

Coenonympha furca sp. nov.

Seems to be a connecting link between california and ochracea, possibly a pale form of the latter. Sexes similar. The ground color is luteous, tinted with pale ochraceous, the marking of the underside showing thru; underside with the maculation variable, similar to ochracea; fore wing with ground color similar to upper side, with a tendency toward the development of auxilliary ocelli; hind wing with ground color luteous white heavily powdered with fuscus, six ocelli, some obsolescent, present. The single male has the ocelli of the hind wing so reduced that they appear as pale blotches except for a few black scales in one blotch at tornus. The ocelli of the hind wing of the female range from two to six.

Type locality: Grand Canyon, Ariz.

Number and sexes of types: Holotype 3, Allotype Q, 3 Q Paratypes; no dates except on one female, 1-7 June.

113,1 add No. 113,1 damei B. & Benj.

Cercyonis damei sp. nov.

Upper side much as in meadi but with the burnt orange color obsolescent, restricted to rings around the ocelli, sometimes practically obsolete; sexual scale patch of male longer and broader, extending nearly to vein 4. Underside: the burnt orange color much reduced and largely replaced by brownish, the striations heavier and more conspicuous; hind wing as in meadi, as dark as the darkest of that species.

Expanse: 43-49 mm.

Type locality: Grand Canyon, Ariz.

Number and sexes of types: Holotype $\, \text{$\delta$}$, 1-7 June; 4 $\, \text{$\delta$}$ Paratypes, one only dated, 8-15 June.

129b remove b assimilis Butl.

130b eritiosa (Bdv.)

1833, Boisduval, Icon. Hist. Lép. Europ., 1, 197, also, Chionobas. 1834-37, Boisduval & Leconte, Lép. Am. Sept. 222, also, Chionobas. 1869, Harris, in Scudder, Ent. Corresp. Harris, 176, (name an error).

1925, Barnes & Benjamin, Can. Ent., LVII, 58, melissa semidea, Oeneis.

Boisduval, 1833, and Boisduval & Leconte, 1834-37, list Satyrus eritiosa Harris manuscript as a synonym of also. Harris, in a letter to Doubleday dated 1849 and published, 1869, in Scudder, Ent. Corresp. Harris, states that he sent to Leconte specimens of "Hipparachia semidea" and "Aegeria exitiosa", and that in consequence there has been a "blunder of the specific name" by Boisduval & Leconte. We find nothing in the International Zoological Code covering such cases and do not know if the name is available or not.

- 130c add c assimilis Butl., change c arctica Gibson to arctica Gibson, this information furnished by Mr. H. T. G. Watkins who kindly compared Butler's type with the figures of Gibson, and informed us that both names represent the same form beyond any reasonable doubt.
- 138 change a macinus Dbldy. & Hew., err. typ., to a mancinus $\overline{D}bldy$. & Hew.
- p. 11 for Migoritis Hbn., type Papilio erato L., substitute the following which has priority:—

Sicyonia Hbn. Type Sicyonio apseudes Hbn.

Before 1816, Huebner, Zutr. exot. Schmett., 1, 25, No. 71, ff. 141-142, apseudes sole species and therefore type.

1816, Huebner, Verz. bek. Schmett., p. 13, heading Sycioniæ (!); lists sara(clytia), thamar (rhea), apseudes, doris (quirina).

1827, Huebner, Verz. bek. Schmett., Anzeiger, p. 7, Sycionia(!).
1875, Scudder, Hist. Sk., p. 268, type designated "rhea(sara, thamar)".

There is a reference in the Verzeichniss to the Zutrage figures of apseudes, indicative that these were published prior to the Verzeichniss. Sicyonia would therefore be a monotypical genus. Scudder's selection of type is based upon the Vereichniss.

148a omit a insularis (Mayn.)

According to Capt. N. D. Riley, 1926, the Entomol., LlX, 241, this race does not occur in Boreal America.

148a change ab. comstocki Gunder to read a comstocki Gunder; add form norm. incarnata Riley.

Gunder described comstocki as an ab. of vanillæ. If names described as "abs." are available specifically and subspecifically, and in general they have been so held in the past, then the name comstocki applies to the subspecies from Boreal America with the name incarnata applicable to the normal form of the same subspecies.

149 add mariamne Scud.

1889, Scudder, Butt. E. U. S., I, 519, claudia, Euptoetia. An Abbot manuscript name listed in the synonymy by Scudder.

157 add d byblis B. & Beni.

Dryas aphrodite race byblis nov.

 δ ; size and somewhat the general appearance of atlantis nikias. Veins as in aphrodite. Base of wing as dark as in Q aphrodite. Nearest to cypris, differing therefrom by smaller size and brighter underside.

Q; similar but darker.

Type locality: White Mts., Ariz.

Number and sexes of types: Holotype \lozenge , Allotype \lozenge , 4 \lozenge 1 \lozenge Paratypes, no dates.

Notes: the present form is of equal rank with many of the so-called species in the group, but we prefer to describe as a race of aphrodite.

160 add b beani B. & Beni.

Dryas allantis race beam nov.

Upper side and underside of fore wing similar to lais. Underside of hind wing similar to atlantis but paler in color than the average of that species. Veins of the fore wing of a sin atlantis. Type locality: Banff, Alta.

Number and sexes of types: Holotype & , 8-15 Aug., Allotype Q. 8-15 Aug., 3 ♂ 3 Q Paratypes, 8-15 Aug., 15-23 Aug., and no date. Notes: this may ultimately prove to be a distinct species.

182 synonym egleis. Change authorship to (Behr).

1860, Morris, Cat. Lep., p. 7, (nom. nud.), Argynnis.

1862, Behr. Proc. Calif. Acad. Sci., H. 174, No. 4, (as egleis?), Argynnis.

1864, Edwards, Proc. Ent. Soc. Phila., III, 435, astarte, Argynnis. All three references have priority over Boisduval's original description. Morris merely lists the nom. nud.

188 add d nichollæ B. & Benj.

Brenthis aphirage race nicholla nov.

Upper side similar to dark specimens of dawsoni. Underside similar to dawsoni but darker, especially on the hind wing. We suspect this is a high altitude form.

Type locality: Rocky Mts.

Number and sexes of types: Holotype 3, Allotype 9, 2 3 19 Paratypes; Mrs. B. Nicholl, ex Coll. Oberthür.

192,1 add No. 192,1 reiffi (Reuss).

1925, Reuss, Int. Ent. Zeit., XIX, 279-280, Boloria.

The species is unknown to us. Described from a single & from British Columbia. We rather suspect this will be close to No. 192a.

197d for alaskensis (Lehm.) substitute gibsoni B. & Benj., with ‡ alaskensis (Lehm.) (nec. Holl.) in synonymy.

Brenthis frigga race gibsoni nov.

We apply this name to the subspecies of frigga discussed and figured by Gibson; 1920. Rept. Can. Arc. Exped., III, (1) 24, pl. V, f, 1. We suspect that Dr. Gibson was correct in assigning these specimens to alaskensis Lehm. but regardless if the synonmy is correct or not, the name alaskensis Lehm. falls as a homonym of alaskensis Holl., under the International Zoological Code subspecific names being coordinate with specific names from the standpoint of nomenclature.

We do not apply the name gibsoni as a nom. nov. for alaskensis Lehm., as we have no real knowledge of Lehmann's type. The group is a difficult one so that we prefer to erect the name gibsoni as a new race of frigga, basing it on the specimens discussed by Gibson. We select as Holotype & a specimen from Barter Island, Northern Alaska, July 4, 1914, ex Coll. D. Jenness, and as Allotype Q the specimen figured by Gibson, the remainder of Gibson's series are designated paratypes.

This subspecies is very similar to saga, but with the medial band of the underside of the hind wing half again as broad. There is a tendency for the median black band of the fore wing to be more diffuse, and on the underside for the ground color to be somewhat paler. The subspecies seems intermediate between the Euro-

pean frigga and the Labrador saga

Notes: Types and Paratypes in the Canadian National Collection, Paratypes in Collection Barnes.

203 omit *phwdon* (H.-S.) which is presumably only an error for **phaëton**. The name is credited to Drury, and there is no indication that there has been any deliberate alteration or emendation of the original orthography.

204 place ab. suprafusa Comst. as suprafusa Comst. in the synonymy of ab. lorquini (Oberth.)

204a the name macglashani (Rivers) should be withdrawn from the synonymy and placed as a subspecies intermediate between dwinellei and olancha. It can take the number 284b while olancha can take the number 284c.

219,1 add 219,1 alena B. & Benj.

Euphydryas alena sp. nov.

Similar to maria, somewhat larger and brighter. All markings very similar, but the usual blackish powderings and heavy black along the veins more restricted. Underside similar to maria, the red tints much brighter.

Expanse: 3 35-39 mm.; ♀ 43-49 mm.

We are describing this as a new species because of the status heretofore given to maria and magdalena. We would not, however, be surprised if subsequent investigations reveal that all of these names are geographical races of anicia.

Type locality: So. Utah.

Number and sexes of types: Holotype &, Allotype Q 14, 12 Q Paratypes, July, 1900, Wm. Barnes Collector.

220,1 add 220,1 carmentis B. & Benj.

Euphydryas carmentis sp. nov.

Allied to the alena and to magdalena, intermediate in size, in this respect resembling maria. Upper side with the pattern and coloration nearly as in alena but tending to produce forms which are much paler. Underside similar to maria but considerably paler, the contrast between the ground color and the yellow transverse markings much more distinct; the general appearance being more like that of wheeleri, but a considerably smaller and much neater looking species.

Expanse: 8 33-36 mm.; ♀ 40-43 mm.

Remarks on the status of alena also apply to carmentis.

Type locality: Pagosa Springs, Colo.

Number and sexes of types: Holotype 3, Allotype 9, 10 3 9 Paratypes, 24-30 June.

251 add ?euclea (Bergstr.)

1780, Bergstrasser, Nomencl. Ins. Hanau, IV, 23-24, pl. CCLXXXIV, ff. 9-10, Papilio.

1889, Scudder, Butt, E. U. S., I, 629, tharos, Phyciodes.

Scudder is responsible for listing euclea in the synonymy of tharos. We have not seen Bergstrasser's work. If the name actually represents a form conspecific with tharos it may have priority over form vern. marcia Edw.

282 add pocahontas (Scud.)

1889, Scudder, Butt. E. U. S., I, 379, j-album, Eugonia. A Harris manuscript name listed in the synonymy by Scudder. 297 change tatila H.-8, to tatila (H.-8.)

p. 16 change Celtiphaga B. & L. to Asterocampa Rob. which has priority with same genotype.

333 add geda (Scud.)

1876, Scudder, Bull. Buff. Soc. Nat. Sci., 111, 102, borealis, Calephelis.

A Boisduval manuscript name published in the synonymy by Scudder.

350 add erytalus (Butl.)

1869, Butler, Cat. Diur. Lep. Descr. Fabr., p 189, columella, Thmolus.

1876, Scudder, Bull. Buff. Soc. Nat. Sci., III, 107 columella, Calli-

Butler lists erytalus Bdv. in Doubleday's List as a synonym of columella. We are unable to locate the Doubleday reference. Scudder lists "erytalus Boisd., M. S., see Butl. Cat. Fabr. Lep., 189."

The name may be a mere misspelling of eurytulus Hbn., but there is nothing to prove this.

354,1 add 354,1 polingi B. & Benj.

Strymon polingi sp. nov.

Allied to alcestis and oslari by the reduced & stigma.

Upperside much as in alcestis but base of fore wings and hind wings with a faint blueish-green tinge. Tails much as in autolycus ilavia. Beneath, ground color and markings as in autolycus but the s. t. line on the fore wing obsolescent, sometimes practically obsolete, and the red on the hind wing more restricted.

The species looks like Edward's figure of ontario, but the red on the upper side of the hind wing is usually obsolete. Also ontario has the normal large stigma in the &.

Expanse: ∂ 27-29 mm.; Q 29-31 mm.

Type locality: Sunny Glen Ranch near Alpine, Brewster Co.,

Number and sexes of types: Holotype Q, Allotype Q, 52 & Q Para-

types, 1-15 June 1926; 73 6 9 Paratypes, 15-30 June 1926.

Notes: named in honor of Mr. O. C. Poling, the collector. The types and part of the paratype series are in the Barnes Collection, the remainder of the paratypes were merely loaned by Mr. Poling and have been returned to him.

363 add b watsoni B. & Benj.

Strymon titus race watsoni nov.

Similar to typical titus, larger, the underside much paler.

Expanse: ♂ 31-34 mm.; ♀ 34-40 mm.

Type localities and number and sexes of types: Holotype 3. Allotype 9, 1 & 1 9 Paratypes, Kerrville, Texas, no dates; 1 & Paratype, Shovel Mt., Texas, 8-15 May.

Notes: presumably collected by Mr. Lacey and Dr. Barnes.

368 change edwardsii (Saund.) to edwardsii (G. & R.).

1867, Grote & Robinson, Trans. Am. Ent. Soc., I, 172, calanus, Thecia.

Saunders manuscript name published as a synonym by Grote & Robinson. Saunders appears not to have published the name until 1869.

369 add calanus (Hbn.) which has priority, change wittfeldii (Edw.) to read wittfeldii (Edw.)

370 remove calanus (*Hbn.*) which is valid over *wittfeldii* (Edw.), change *falacer* (Godt.) to falacer (*Godt.*)

Hubner's figures of calanus clearly show the long-tailed species strongly marked with red to which Edwards gave the name wittfeldii. S. falacer appears to be the next available name for calanus Auct. nec Hbn. Its type, if in existence, should be examined to be certain that it is not the species subsequently described as edwardsii.

372 add ‡ liparops (Fletch.) (nec Bdv. & Lec.)

1904, Fletcher, Trans. Roy. Soc. Can., (1903), pl., strigosa var., Thecia.

1904, Fletcher, Can Ent., XXXVI, 124, pl., strigosa var.. Thecla. Fletcher attempted to "save" the Boisduval & Leconte name, and thus made a homonym. We know of no species exactly like the Boisduval & Leconte plate. The plate may be poor, or the form of strigosa most common in Manitoba may occur in Georgia as an occasional mutation. We rather suspect the latter explanation as a specimen ex Collections Boisduval and Oberthur was received by the Barnes Collection; its label reading, "Liparops Boisd. A hyperici Abb. Am. bor.", and presumably labeled by Boisduval. This specimen is normal eastern strigosa. We suspect that some manuscript plate of Abbot's will show the fulvous patches present in liparops but absent in strigosa. The Barnes Collection did not obtain a type of liparops, or any specimen ex Collection Boisduval showing fulvous patches, from the Oberthur Collection.

372a add ab. pruina (Scud.)

1889, Scudder, Butt. E. U. S., II, 879, liparops ab., Thecla.

413 add anthelle (Scud.)

1847, Doubleday, List Lep. B. M., II, 55, Polyommatus.

1876, Scudder, Bull. Buff. Soc. Nat. Sci., III, 128, dorcas, Epidema. Boisduval manuscript name first listed by Doubleday who merely gives, "Polyommatus anthelle Boisd. MSS. a-d. Martin's Falls, Albany River, Hudson's Bay. Presented by G. Barneston, Esq.".

The first indication we find rendering the name available is

that of Scudder, 1876.

The Barnes Collection contains the Boisduval manuscript type.

414 add hypoxanthe (Kirby).

1847, Doubleday, List Lep. B. M., II, 54, Polyommatus.

1862, Kirby, Man, Europ. Butt., p. 91, f. 11, Chrysophanus.

1871, Kirby, Syn. Cat. Diur. Lep., p. 343. Lycaena.

1889, Kirby, Europ. Butt. & Moths, p. 54,? dorilis, Lycaena.

The Barnes Collection received three specimens as types of the Boisduval manuscript name hypoxanthe from the Oberthur Collection, and a fourth specimen, without label, not listed as a type. Dr. Hofer's letter reads, "Chrysoph, hypoxanthe Bdv. (epixanthe) Types.", but the only specimen bearing the Boisduval handwritten detremination label has this label reading, "Hypoxanthe Boisd. Canada.". Hofer is correct in that these specimens are epixanthe Bdv. & Lec., but this latter name was applied to specimens from "New Harmony, Ind.". The two Boisduval Collection specimens not bearing handwritten labels may be the types of epixanthe, or the manuscript name hypoxanthe may have been change to epixanthe and the Canadian "type" not mentioned.

The Boisduval manuscript name appears to have been first mentioned by Doubleday who merely gives, "Polyommatus hypoxanthe, Boisd, MSS, a, b, Polish Ukraine, Presented by Dr. Dowler," Kirby, 1871, questions the locality. In 1889 he states under doritis, "L, hypoxanthe is probably not distinct from this,"

414a add amice(us (8cud.) which has priority, change phædrus (Hall) to read phædrus (Hall).

1847, Doubleday, List Lep. B. M., 11, 55, Polyonimatus.

1876. Scudder, Bull. Buff. Soc. Nat. Sci., III, 128, epixanthe, Epidemia.

A Boisduval manuscript name listed by Doubleday who merely gives. "Polyommatus amicetus, Boisd. MSS. a-c Newfoundland. Presented by W. St. John. Esq." The first indication we find which renders the name available is that published by Scudder, 1876. The Boisduval manuscript type appears to have been lost, so that all we can do is to accept the comparison with it made by Doubleday, and give the name of the minor Newfoundland race of epixanthe, with priority over phædrus (Hall).

415 add bacchus (Scud.)

1889, Scudder, Butt. E. U. S., II, 998, hypophlæas, Heodes.

A Harris manuscript name listed by Schidder as a synonym of hypophlæas.

p. 19 change Plebeius L. to Plebejus L. to conform with original orthography. This has been called to our attention by Mr. E. H. Blackmore.

433 add (partim. ¿ nec ♀) after argyrotoxus (Behr).

433 after philemon (Bdv.) add ab, argyrotoxus (Behr) (partim. Q nec \mathcal{A}).

456e add ab. sinepunctata Comst.

458 no change. A note may be of some value.

The Barnes Collection received 2 of 1 Q as types of Lycaenopsis pseudargiolus (Bdv. & Lec.). The males do not agree with the original description and figures as well as the female. The males are neglecta Edw. and may be spurious types. The female is the form commonly going as pseudargiolus in collections, agrees well with the original description and figures, and presumably should be considered the existing true type.

458 gen. ast. neglecta (Edw.) add deutargiolus (Scud.)

1869, Doubleday, in Scudder, Ent. Corresp. Harris, p. 164, (nom. nud.).

1869, Haris, in Scudder, Ent. Corresp. Harris, p. 165, (nom. nud.). 1869, Scudder, in Scudder, Ent. Corresp. Harris, (footnote) neglecta. L.

The description by Harris consists of, "The name Polyommatus pseudargiolus must be applied exclusively to the Southern species, if the Northern blue species is distinct from it. Deutargiolus would be a good name for the Northern species. Your specimens will enable you to point out the distinctive characters, which I shall be glad to see from your own observations, as well as those by which you separate Argynnis Aphrodite from Cybele."

Scudder has added a footnote to the same page, "(It has since

been named L. neglecta by Mr. W. H. Edwards)."

It is rather questionable if the single descriptive adjective used by Harris can be construed as an indication of what the name deutargiolus represents, so we credit authorship to Scudder because of his indication on the same page.

479 add hedysarum Scud.

1889, Scudder, Butt. E. U. S., II, 1418, lycidas, Achalarus. An Abbot manuscript name listed in the synonymy by Scudder.

480 add casica (H.-S.) which has priority; place epigena (Butl.) in the synonymy as epigena (Butl.)

Prof. M. Draudt has kindly informed us that he possesses a drawing of the type of casica made by the late Dr. Carl Ploetz and that the name is unquestionably applicable to the same form as epigena Butl. with priority.

497 add a freija (Warr.)

1924, Warren, Trans. Ent. Soc. Lond., (1-2), pp. lvi.-lvii, Hesperia.

1926, Bell, Ent. News, XXXVII, 109, Hesperia.

We would call attention to the fact that while centaureæ was described by Rambur, 1839, Faun. Ent. And., II, 315, pl. VIII, f. 10, that according to Boisduval, 1840, Gen. et Ind. Method., p. 36, this name is a Boisduval manuscript name based mainly upon specimens from Scandanavia and Lapland, so that if two species are present in the European collections as centaureæ, Warren may well have redescribed the true centaureæ as freija. If the European and Labrador types of freija are conspecific, and if the true centaureæ does not occur in North America, then the name wyandot (Edw.) would appear available for the North American species.

Labrador material seems intermediate between Colorado and

eastern United States specimens.

Warren's superficial characters appear to be useless so far as

Labrador material is concerned.

It appears to us that there is a little mix-up here which can only be satisfactorily settled by the critical examination of all types concerned. Therefore we tentatively retain the Warren name as a subspecies of centaureæ Auct., ?Ramb.—wyandot (Edw.?).
We wrote to Professor M. Draudt to see if he could throw any

further light upon this matter, but he replied that the case was a

very difficult one and equally a puzzle to him.

503 add albovittata (Grt.)

1873, Grote, Bull. Buff. Soc. Nat. Sci., I. 168, communis, Hesperia. Presumably a manuscript name, quoted as a part of a letter from Zeller, but Grote gives the indication which renders the name available.

523 add hamamalidis (Scud.)

1889, Scudder, Butt. E. U. S., II, 1507, icelus, Thanaos. A Fitch manuscript name listed in the synonymy by Scudder.

595 add enys Scud.

1870, Butler, Ent. Mo. Mag., VII, 93, Pamphila.

1889, Scudder, Butt. E. U. S., II, 1683, peckius, Polites.

Presumably a Boisduval manuscript name merely mentioned by Butler, but placed in the synonymy of peckius by Scudder.

598 add ?\$osyka (Edw.) (partim, 9 nec 3) See notes under bais (Scud.)

605 add ? bwis (Seud.)

1889, Scudder, Butt. E. U. S., III, 1865, osyka, Euphyes.

A Boisduval manuscript name published as a synonym of osyka (Edw.)

According to Barnes & McDunnough, 1916, Contrib., III, (2), 135-136, the three types of osyka represent three different species, the β type being a specimen of vestris (Bdv.), one Q type being eufala (Edw.) and the other Q type possibly being a worn brettus.

It, therefore, becomes questionable just what species Scudder had in mind as osyka, but the chances are strongly against vestris which was well known to him under the name metacomet. We merely tentatively place bæis under vestris following Barnes & McDunnough's restriction of the name osyka.

639 change samoset (Scud.) to samoset (Scud.) and hegon (Scud.) to hegon (Scud.)

Scudder, 1868, Proc. Bost. Soc. Nat. Hist., XI, 382, appears to be the first worker to recognize the synonymy, and took advantage of the rights of the first revisional author to select the name samoset, rather than hegon, to stand, both names having been published on the same page in the same work, 1862, Proc. Essox Inst. III, 176.

645 add a reversa (Jones)

1926, Jones, Ent. News, XXXVII, 197, carolina var., (? an sp. dist.), Amblyscirtes.

648 add chamis Scud.

1889, Scudder, Butt. E. U. S., II, 1768, accius, Lerema.

A Boisduval manuscript name listed in the synonymy by Scudder.

650 add \ddagger osyka (Edw.) (partim., Q nec A).

See notes under bais Scud.

652 add orthomenes Scud.

1889, Scudder, Butt. E. U. S., II, 1761, maculata, Oligoria.

A Boisduval manuscript name listed in the synonymy by Scudder.

656 add cochles Scud.

1889, Scudder, Butt. E. U. S., III, 1867, panoquin, Prenes.

"Latr., MS." vide Scudder, who places the name in the synonymy of panoquin (Scud.)